### **City of Huntsville**

# 2009 Drinking Water Quality Report for the Huntsville Water System

(936) 294-5700

### **Know the Facts About Your Drinking Water**

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. This report is the summary of the results from the most recent data available from the Texas Commission on Environmental Quality. Only those with concentrations greater than detection are provided.

#### En Espanol

Este reporte incluye informacion importante sobre el agua para tomr. Si tiene preguntas o' discusiones sobre este reporte en espanol, facor de llamar al tel. (936) 294-5743 par hablar con una persona bilingue en espanol.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, those with HIV/AIDS or other immune problems:

Some people may be more vulnerable to contaminants than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

#### Where Do We Get Our Water?

Water from the City of Huntsville is obtained from two sources: (1) Seven wells owned and operated by the City of Huntsville and (2) Treated surface water from the Huntsville Regional Water Supply System (HRWSS) as owned and operated by the Trinity River Authority (TRA) of Texas. These two sources are blended, as needed, to provide an ample supply of water year round. Approximately 75% of the water is purchased, as a finished product, from the HRWSS with the remaining 25% produced from the City wells as pumped from the Gulf Coast aquifer.

#### **ALL Drinking Water May Contain Contaminants**

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling EPA's Safe Drinking Water Hotline (1-800-426-4791).

## Cryptosporidium & Giardia

Cryptosporidium and Giardia are microscopic parasites affecting the digestive tracks of humans and animals. They are shed in the feces and when ingested, may result in diarrhea, cramps, fever and other gastrointestinal symptoms. People with healthy immune systems usually recover from Cryptosporidium within two weeks. Immuno-compromised persons are more vulnerable and at greater risk from infections.

#### **Understanding the Charts**

The charts that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. The list below explains the terms used in the charts.

**Maximum Contaminant Level Goal (MCLG)** – The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

**Maximum Contaminant Level (MCL)** – The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.

Action Level – The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow

NTU – Nephelometric turbidity units are a measurement of turbidity using a nephelometer. This apparatus measures the concentration of a suspension by its scattering of a beam of light.

ppm – Parts per million or milligrams per liter (mg/l)

**ppb** – Parts per billion or micrograms per liter (ug/l)

N/A – MCL not applicable – not regulated. Special Monitoring Requirement.

pCi/L - Picocuries per liter (a measure of radioactivity).

**Treatment Technique** (TT) – A required process intended to reduce the level of a contaminant in drinking water.

### **Secondary Constituents**

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

## TRA Huntsville Regional Water Supply System Treatment Plant

INORGANICS

11.1/	INURGANICS									
Year	Constituent	Highest Level	Range of	MCL	MCLG	Unit of	Source of Constituent			
		at any	detected			Measure				
		Sampling Point	levels							
2008	Barium	0.135	0.072-	2	2	ppm	Discharge of drilling wastes; discharge			
			0.135				from metal refineries; erosion of natural			
							deposits.			
2008	Nitrate	4.93	0.11-4.93	10	10	ppm	Runoff from fertilizer use; leaching from			
							septic tanks; sewage; erosion of natural			
							deposits.			
2006	Gross Reta Emitters	11.4	4-114	50	0	nCi/I	Decay of natural and manmade deposits			

**ORGANICS** 

Year	Constituent	Highest Level at any	Range of	MCL	MCLG	Unit of	Source of Constituent
		Sampling Point	Detected Levels			Measure	
2008	Atrazine	0.51	0.51-0.51	3	3	ppb	Runoff from herbicide used on
							row crops.
2008	Simazine	0.19	0.19-0.19	4	4	ppb	Herbicide runoff.

UNREGULATED CONTAMINANTS

UNI	UNREGUEATED CONTAMINANTS									
Year	Constituent	Average of All	Range of Detected	Unit of	Source of Constituent					
		Sampling Points	Levels	Measure						
2008	Chloroform	1.5	1.5-1.5	ppb	Byproduct of drinking water disinfection.					
2008	Bromoform	2.4	2.4-2.4	ppb	Byproduct of drinking water disinfection.					
2008	Bromodichloromethane	3.2	3.2-3.2	ppb	Byproduct of drinking water disinfection.					
2008	Dibromochloromethane	4.6	4.6-4.6	ppb	Byproduct of drinking water disinfection.					

Reason for Monitoring: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

DISINFECTION BY-PRODUCTS

20101	DISTRIBUTION DI TRODUCTO									
Year	Constituent	Average of All Sampling	Range of Detected	MCL	Unit of Measure					
		Points	Levels							
2008	Total Haloacetic Acids	10.2	1.1-14.1	60	ppb					
2008	Total Trihalomethanes	24.3	0-29	80	ppb					

## City of Huntsville "Blended" Distribution System Water

**TURBIDITY** 

Year	Constituent	Highest Single	Lowest Monthly % of	Turbidity	Units of	Source of Constituent
		Measurement	Samples Meeting Limits	Limits	Measure	
2008	Turbidity	0.40	99%	0.3	NTU	Soil runoff.

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

INO	RGANICS						
Year	Constituent	Highest Level at Any Sampling Point	Range of Detected Values	MCL	MCLG	Unit of Measure	Source of Constituent
2008	Arsenic	5	3-5	10	0	ppb	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production waste.
2008	Barium	0.135	0.072- 0.135	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2008	Fluoride	0.86	0.46-0.86	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth. Discharge from fertilizer and aluminum factories
2008	Nitrate	4.93	0.11-4.93	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.
2006	Gross alpha adjusted	3.3	0.0-3.3	15	0	pci/l	Erosion of natural deposits.
2006	Combined Radium 226 & 228	0.9	0-0.9	5	0	pci/l	Erosion of natural deposits.
2006	Gross beta emitters	11.4	4-11.4	50	0	pci/l	Decay of natural and manmade deposits.

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OIII	OKOTI VED							
Year	Constituent	Highest Level at any	Range of	MCL	MCLG	Unit of	Source of Constituent	
		Sampling Point	<b>Detected Levels</b>			Measure		
2008	Atrazine	0.51	0.51-0.51	3	3	ppb	Runoff from herbicide used on	
							row crops.	
2008	Simazine	0.19	0.19-0.19	4	4	ppb	Herbicide runoff.	

UNREGULATED CONTAMINANTS

Year	Constituent	Average of All	Range of Detected	Unit of	Source of Constituent
		Sample Points	Values	Measure	
2008	Chloroform	1.5	1.5-1.5	ppb	By-product of drinking water disinfection.
2008	Bromoform	2.4	2.4-2.4	ppb	By-product of drinking water disinfection.
2008	Bromodichloromethane	3.2	3.2-3.2	ppb	By-product of drinking water disinfection.
2008	Dibromochloromethane	4.6	4.6-4.6	ppb	By-product of drinking water disinfection.

Reason for Monitoring: Unregulated contaminant monitoring helps EPA to determine where certain contaminants occur and whether it needs to regulate those contaminants.

DISINFECTION BY-PRODUCTS

Year	Constituent	Average of All	Range of	MCL	Unit of	Source of Constituent
		Sampling Points	Detected Levels		Measure	
2008	Total Haloacetic Acids	10.3	1.1-14.1	60	ppb	By-product of drinking water disinfection.
2008	Total Trihalomethanes	24.3	0-29	80	ppb	By-product of drinking water chlorination.

MAXIMUM RESIDUAL DISINFECTANT LEVEL

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Year	Constituent	Highest Single	Range of Detected	MCL	MCLG	Units of	Source of Constituent
		Measurement	Levels			Measure	
2008	Chloramine	3.9	0.6-3.9	4	4	ppm	Disinfectant used to control microbes.

LEAD AND COPPER

Year	Constituent	The 90 <sup>th</sup>	Number of Sites	Action	Unit of	Source of Constituent
		Percentile	Exceeding Action Level	Level	Measure	
2007	Copper	0.385	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2007	Lead	4.7	0	15	ppb	Corrosion of household plumbing; Erosion of natural deposits.

## COLIFORMS

What are coliforms? Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many other disease—causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption. Fecal coliform bacteria and, in particular, *E. coli*, are members of the coliform bacteria group originating in the intestinal tract of warm blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (*E. coli*) in drinking water may indicate recent contamination of the drinking water with fecal material. The following table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

2007

TOTAL COLIFORM – NOT DETECTED FECAL COLIFORM – NOT DETECTED

### **Contact Person**

Jason Pierce Water Services Superintendent (936) 294-5700

## **Public Participation**

The City Council meets are various times throughout the year. Call 936-291-5400 for meeting times or visit our web site at <a href="http://www.huntsvilletx.gov">http://www.huntsvilletx.gov</a> for a complete agenda. All meetings are held at City Hall, 1212 Avenue M.